Konstantinos Papagelis

List of Publications by Year
in descending order

125 papers	9,901 citations	109321 35 h-index	34986 98 g-index
128 all docs	128 docs citations	128 times ranked	14470 citing authors

#	Article	IF	Citations
1	Uniaxially Strained Graphene: Structural Characteristics and G-Mode Splitting. Materials, 2022, 15, 67.	2.9	1
2	Efficient Mechanical Stress Transfer in Multilayer Graphene with a Ladder-like Architecture. ACS Applied Materials & Interfaces, 2021, 13, 4473-4484.	8.0	9
3	Structural Defects Modulate Electronic and Nanomechanical Properties of 2D Materials. ACS Nano, 2021, 15, 2520-2531.	14.6	46
4	Width Dependent Elastic Properties of Graphene Nanoribbons. Materials, 2021, 14, 5042.	2.9	5
5	Time-Resolved Raman Scattering in Exfoliated and CVD Graphene Crystals. Journal of Physical Chemistry C, 2021, 125, 21003-21010.	3.1	6
6	Biaxial strain engineering of CVD and exfoliated single- and bi-layer MoS₂ crystals. 2D Materials, 2021, 8, 015023.	4.4	26
7	Lattice dynamics and thermodynamic properties of Y3Al5O12 (YAG). Journal of Physics and Chemistry of Solids, 2021, 162, 110512.	4.0	6
8	Thermal properties enhancement of epoxy resins by incorporating polybenzimidazole nanofibers filled with graphene and carbon nanotubes as reinforcing material. Polymer Testing, 2020, 82, 106317.	4.8	52
9	Doping-Induced Stacking Transition in Trilayer Graphene: Implications for Layer Stacking Manipulation. ACS Applied Nano Materials, 2020, 3, 11861-11868.	5.0	9
10	Mechanical, Electrical, and Thermal Properties of Carbon Nanotube Buckypapers/Epoxy Nanocomposites Produced by Oxidized and Epoxidized Nanotubes. Materials, 2020, 13, 4308.	2.9	17
11	Thermomechanical Response of Supported Hexagonal Boron Nitride Sheets of Various Thicknesses. Journal of Physical Chemistry C, 2020, 124, 12134-12143.	3.1	7
12	Production and processing of graphene and related materials. 2D Materials, 2020, 7, 022001.	4.4	333
13	A novel mild method for surface treatment of carbon fibres in epoxy-matrix composites. Composites Science and Technology, 2018, 157, 178-184.	7.8	28
14	Evaluating arbitrary strain configurations and doping in graphene with Raman spectroscopy. 2D Materials, 2018, 5, 015016.	4.4	95
15	Strain Engineering in Highly Wrinkled CVD Graphene/Epoxy Systems. ACS Applied Materials & Interfaces, 2018, 10, 43192-43202.	8.0	14
16	Controllable, eco-friendly, synthesis of highly crystalline 2D-MoS ₂ and clarification of the role of growth-induced strain. 2D Materials, 2018, 5, 035035.	4.4	23
17	Compressive response and buckling of graphene nanoribbons. Scientific Reports, 2018, 8, 9593.	3.3	25
18	An Evaluation of Graphene as a Multi-Functional Heating Element for Biomedical Applications. Journal of Biomedical Nanotechnology, 2018, 14, 86-97.	1.1	4

#	Article	IF	Citations
19	Strained hexagonal boron nitride: Phonon shift and GrÃ¼neisen parameter. Physical Review B, 2018, 97, .	3.2	51
20	Wrinkled Few-Layer Graphene as Highly Efficient Load Bearer. ACS Applied Materials & Interfaces, 2017, 9, 26593-26601.	8.0	46
21	Atomistic potential for graphene and other sp²carbon systems. Physical Chemistry Chemical Physics, 2017, 19, 30925-30932.	2.8	13
22	Phosphorous Diffusion in N2+-Implanted Germanium during Flash Lamp Annealing: Influence of Nitrogen on Ge Substrate Damage and Capping Layer Engineering. ECS Journal of Solid State Science and Technology, 2017, 6, P418-P428.	1.8	5
23	Optical detection of strain and doping inhomogeneities in single layer MoS2. Applied Physics Letters, 2016, 108, .	3.3	119
24	Mechanical Stability of Flexible Graphene-Based Displays. ACS Applied Materials & Interfaces, 2016, 8, 22605-22614.	8.0	56
25	Stress and charge transfer in uniaxially strained CVD graphene. Physica Status Solidi (B): Basic Research, 2016, 253, 2355-2361.	1.5	12
26	Graphene flakes under controlled biaxial deformation. Scientific Reports, 2016, 5, 18219.	3.3	84
27	Uniaxial compression of suspended single and multilayer graphenes. 2D Materials, 2016, 3, 025033.	4.4	21
28	Long-lived discrete breathers in free-standing graphene. Chaos, Solitons and Fractals, 2016, 87, 262-267.	5.1	20
29	Compression behavior of simply-supported and fully embedded monolayer graphene: Theory and experiment. Extreme Mechanics Letters, 2016, 8, 191-200.	4.1	17
30	Phonon properties of graphene derived from molecular dynamics simulations. Scientific Reports, 2015, 5, 12923.	3.3	113
31	Experimentally derived axial stressâ€"strain relations for two-dimensional materials such as monolayer graphene. Carbon, 2015, 81, 322-328.	10.3	43
32	Stress Transfer Mechanisms at the Submicron Level for Graphene/Polymer Systems. ACS Applied Materials & Interfaces, 2015, 7, 4216-4223.	8.0	105
33	Deformation of Wrinkled Graphene. ACS Nano, 2015, 9, 3917-3925.	14.6	143
34	Epoxidized multi-walled carbon nanotube buckypapers: A scaffold for polymer nanocomposites with enhanced mechanical properties. Chemical Engineering Journal, 2015, 281, 793-803.	12.7	23
35	Exotic carbon nanostructures obtained through controllable defect engineering. RSC Advances, 2015, 5, 39930-39937.	3.6	12
36	Suspended monolayer graphene under true uniaxial deformation. Nanoscale, 2015, 7, 13033-13042.	5.6	52

#	Article	IF	Citations
37	Embedded trilayer graphene flakes under tensile and compressive loading. 2D Materials, 2015, 2, 024009.	4.4	24
38	Transforming graphene nanoribbons into nanotubes by use of point defects. Journal of Physics Condensed Matter, 2014, 26, 125301.	1.8	8
39	Failure Processes in Embedded Monolayer Graphene under Axial Compression. Scientific Reports, 2014, 4, 5271.	3.3	65
40	Raman spectroscopy of graphene at high pressure: Effects of the substrate and the pressure transmitting media. Physical Review B, 2013, 88, .	3.2	56
41	Graphene production by dissociation of camphor molecules on nickel substrate. Thin Solid Films, 2013, 527, 31-37.	1.8	37
42	Open structured in comparison with dense multi-walled carbon nanotube buckypapers and their composites. Composites Science and Technology, 2013, 77, 52-59.	7.8	28
43	Efficient exfoliation of graphene sheets in binary solvents. Materials Letters, 2013, 94, 47-50.	2.6	22
44	Electronic Properties of Semiconducting Polymer-Functionalized Single Wall Carbon Nanotubes. Macromolecules, 2013, 46, 2590-2598.	4.8	19
45	Chapter 9. Raman Spectroscopy of Carbon Nanotubeâ€“Polymer Hybrid Materials. RSC Nanoscience and Nanotechnology, 2013, , 253-269.	0.2	0
46	Elastic Properties of Crystallineâ€“Amorphous Coreâ€“Shell Silicon Nanowires. Journal of Physical Chemistry C, 2013, 117, 4219-4226.	3.1	9
47	In-plane force fields and elastic properties of graphene. Journal of Applied Physics, 2013, 113, .	2.5	98
48	Structural Properties of Chemically Functionalized Carbon Nanotube Thin Films. Materials, 2013, 6, 2360-2371.	2.9	22
49	Phononic band gap engineering in graphene. Journal of Applied Physics, 2012, 112, .	2.5	13
50	Buckypaper as Pt-free cathode electrode in photoactivated fuel cells. Electrochimica Acta, 2012, 80, 399-404.	5.2	29
51	Phonon and Structural Changes in Deformed Bernal Stacked Bilayer Graphene. Nano Letters, 2012, 12, 687-693.	9.1	65
52	High-pressure Raman study of stacked-cup carbon nanofibers. High Pressure Research, 2011, 31, 131-135.	1.2	2
53	Raman 2D-Band Splitting in Graphene: Theory and Experiment. ACS Nano, 2011, 5, 2231-2239.	14.6	271
54	High pressure Raman scattering of silicon nanowires. Nanotechnology, 2011, 22, 195707.	2.6	19

#	Article	IF	Citations
55	Development of a universal stress sensor for graphene and carbon fibres. Nature Communications, 2011, 2, .	12.8	172
56	Raman spectroscopic study of the rare-earth fullerides Eu6âˆ’xSrxC60. Nanoscale, 2011, 3, 2490.	5.6	2
57	One Pot Synthesis and Characterization of Ultra Fine CeO₂ and Cu/CeO₂ Nanoparticles. Application for Low Temperature CO Oxidation. Journal of Nanoscience and Nanotechnology, 2011, 11, 8593-8598.	0.9	11
58	High-pressure Raman study of the Sm_{2.75}C₆₀fulleride. High Pressure Research, 2011, 31, 13-17.	1.2	4
59	Carbon nanotubeâ€“polymer composites: Chemistry, processing, mechanical and electrical properties. Progress in Polymer Science, 2010, 35, 357-401.	24.7	2,738
60	Polymer and Hybrid Electron Accepting Materials Based on a Semiconducting Perfluorophenylquinoline. Macromolecules, 2010, 43, 4827-4828.	4.8	23
61	Compression Behavior of Single-Layer Graphenes. ACS Nano, 2010, 4, 3131-3138.	14.6	282
62	Vibrational properties of (Gd1âˆ’xYx)3Ga5O12 solid solutions. Journal of Applied Physics, 2010, 107, .	2.5	36
63	Chemical Synthesis and Self-Assembly of Hollow Ni/Ni₂P Hybrid Nanospheres. Journal of Physical Chemistry C, 2010, 114, 7582-7585.	3.1	50
64	Raman spectroscopy of single wall carbon nanotubes functionalized with terpyridineâ€“ruthenium complexes. Physica Status Solidi (B): Basic Research, 2009, 246, 2721-2723.	1.5	11
65	Subjecting a Graphene Monolayer to Tension and Compression. Small, 2009, 5, 2397-2402.	10.0	400
66	Carbon nanotubes decorated with terpyridineâ€ruthenium complexes. Journal of Polymer Science Part A, 2009, 47, 2551-2559.	2.3	20
67	The effect of oxidation treatment on the properties of multi-walled carbon nanotube thin films. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2009, 165, 135-138.	3.5	62
68	Carbon nanotubeâ€“fluorenevinylene hybrids: Synthesis and photophysical properties. Chemical Physics Letters, 2009, 483, 241-246.	2.6	7
69	Single-walled carbon nanotubes decorated with a pyreneâ€“fluorenevinylene conjugate. Nanotechnology, 2009, 20, 135606.	2.6	20
70	Two-dimensional electronic and vibrational band structure of uniaxially strained graphene fromab initiocalculations. Physical Review B, 2009, 80, .	3.2	105
71	N-Octyl-O-sulfate chitosan stabilises single wall carbon nanotubes in aqueous media and bestows biocompatibility. Nanoscale, 2009, 1, 366.	5.6	19
72	Novel Hybrid Materials Consisting of Regioregular Poly(3â€octylthiophene)s Covalently Attached to Singleâ€Wall Carbon Nanotubes. Chemistry - A European Journal, 2008, 14, 8715-8724.	3.3	32

#	Article	IF	Citations
73	Chemical oxidation of multiwalled carbon nanotubes. Carbon, 2008, 46, 833-840.	10.3	2,376
74	Diameter-Selective Solubilization of Carbon Nanotubes by Lipid Micelles. Journal of Nanoscience and Nanotechnology, 2008, 8, 420-423.	0.9	17
75	Magnetic ordering in the ammoniated alkali fullerides (NH3)K3â^'xRbxC60(x= 2, 3). Journal of Physics Condensed Matter, 2007, 19, 386235.	1.8	8
76	Thermal Characterization of Porous Silicon Micro-Hotplates using IR Thermography. , 2007, , .		0
77	Phonon-drag thermopower of a ballistic semiconducting single-wall carbon nanotube. AIP Conference Proceedings, 2007, , .	0.4	1
78	Waterâ€Soluble Carbon Nanotubes by Redox Radical Polymerization. Macromolecular Rapid Communications, 2007, 28, 1553-1558.	3.9	35
79	Second-order Raman study of double-wall carbon nanotubes under high pressure. Physica Status Solidi (B): Basic Research, 2007, 244, 116-120.	1.5	7
80	High pressure Raman study of the secondâ€order vibrational modes of singleâ€and doubleâ€walled carbon nanotubes. Physica Status Solidi (B): Basic Research, 2007, 244, 4069-4073.	1.5	8
81	Covalently functionalized carbon nanotubes as macroinitiators for radical polymerization. Physica Status Solidi (B): Basic Research, 2007, 244, 4046-4050.	1.5	28
82	Colloidal stability of carbon nanotubes in an aqueous dispersion of phospholipid. International Journal of Nanomedicine, 2007, 2, 761-6.	6.7	19
83	Raman study of metallic carbon nanotubes at elevated pressure. Diamond and Related Materials, 2006, 15, 1075-1079.	3.9	19
84	Raman study of polycrystalline PbWO4under high pressure. High Pressure Research, 2006, 26, 421-425.	1.2	8
85	11B NMR Study of Pure and Lightly Carbon-Doped MgB2 Superconductors. Journal of Superconductivity and Novel Magnetism, 2005, 18, 521-528.	0.5	5
86	Double-wall carbon nanotubes under pressure: Probing the response of individual tubes and their intratube correlation. Physical Review B, 2005, 72, .	3.2	29
87	Pressure screening in the interior of primary shells in double-wall carbon nanotubes. Physical Review B, 2005, 71, .	3.2	62
88	Negative Thermal Expansion in the Mixed Valence Ytterbium Fulleride, Yb2.75C60. Chemistry of Materials, 2005, 17, 4474-4478.	6.7	26
89	Evidence of Electronâ€"Phonon Interaction in Al-Substituted Mg1-xAlxB2. Journal of Superconductivity and Novel Magnetism, 2004, 17, 199-203.	0.5	3
90	High pressure Raman study of Y3Al5O12. Physica Status Solidi (B): Basic Research, 2004, 241, 3149-3154.	1.5	23

#	Article	IF	Citations
91	High pressure Raman study of BaMoO4. Physica Status Solidi (B): Basic Research, 2004, 241, 3155-3160.	1.5	25
92	Raman spectroscopic study of carbon substitution in MgB2. Journal of Physics and Chemistry of Solids, 2004, 65, 73-77.	4.0	24
93	Lattice collapse in mixed-valence samarium fulleride Sm2.75C60 at high pressure. Dalton Transactions, 2004, , 3144.	3.3	16
94	Inelastic neutron scattering study of the intermolecular vibrational modes of Ba4C60. Chemical Physics Letters, 2003, 377, 125-130.	2.6	2
95	Infrared spectroscopy and lattice dynamical calculations of Gd3Al5O12, Tb3Al5O12 and Lu3Al5O12 single crystals. Journal of Physics and Chemistry of Solids, 2003, 64, 599-605.	4.0	41
96	Î¼SR studies of superconducting MgB1.96C0.04. Physica B: Condensed Matter, 2003, 326, 346-349.	2.7	4
97	Antiferromagnetic ordering in the expanded (NH3)Rb3C60 fulleride. Physica B: Condensed Matter, 2003, 326, 572-576.	2.7	7
98	Pressure evolution of the phonon modes and force constants of Tb3Al5O12 and Lu3Al5O12. Physica Status Solidi (B): Basic Research, 2003, 235, 348-353.	1.5	4
99	The effect of anisotropic intermolecular interactions on the pressure response of polymeric fullerenes. Physica Status Solidi (B): Basic Research, 2003, 235, 369-373.	1.5	0
100	Temperature-induced valence transition and associated lattice collapse in samarium fulleride. Nature, 2003, 425, 599-602.	27.8	142
101	Vibrational properties of the rare earth aluminum garnets. Journal of Applied Physics, 2003, 94, 6491-6498.	2.5	38
102	Raman study of Mg, Si, O, and N implanted GaN. Journal of Applied Physics, 2003, 94, 4389-4394.	2.5	95
103	Î¼ + SR study of carbon-doped MgB 2 superconductors. Europhysics Letters, 2003, 61, 254-260.	2.0	23
104	High-pressure Raman study and lattice dynamical calculations for SrWO4. Journal of Physics Condensed Matter, 2002, 14, 12641-12650.	1.8	34
105	Infrared lattice spectra of Tm3Al5O12and Yb3Al5O12single crystals. Journal of Physics Condensed Matter, 2002, 14, 915-923.	1.8	14
106	High-pressure effects on the Raman spectrum and the force constants of the rare-earth aluminium garnets (RE3Al5O12). Journal of Physics Condensed Matter, 2002, 14, 3875-3890.	1.8	13
107	Phase separation in carbon-doped MgB2 studied by means of alternating current susceptibility measurements. Journal of Physics Condensed Matter, 2002, 14, 7363-7369.	1.8	9
108	Lattice Dynamical Properties of the Rare Earth Aluminum Garnets (RE3Al5O12). Physica Status Solidi (B): Basic Research, 2002, 233, 134-150.	1.5	65

#	Article	IF	Citations
109	Phonon Modes in Yb3Al5O12: Pressure Dependence and Model Calculations. Physica Status Solidi (B): Basic Research, 2001, 223, 343-347.	1.5	3
110	Raman modes of the two-dimensional tetragonal polymeric phase of C60 under high pressure. Journal of Chemical Physics, 2001, 114, 9099-9104.	3.0	8
111	High pressure study of the 2D polymeric phase of C60by means of raman spectroscopy. High Pressure Research, 2000, 18, 145-151.	1.2	1
112	The pressure response of Raman active phonon modes of Tm3Al5O12. High Pressure Research, 2000, 18, 117-123.	1.2	2
113	Effect of high hydrostatic pressure on the intramolecular modes of(C59N)2. Physical Review B, 1999, 59, 3180-3183.	3.2	6
114	High pressure effects on the Raman spectrum of CsC60 polymer. Physica B: Condensed Matter, 1999, 265, 234-238.	2.7	6
115	Effect of high hydrostatic pressure on the phonon modes of Tb3Al5O12 and Dy3Al5O12 single crystals. Physica B: Condensed Matter, 1999, 265, 277-281.	2.7	12
116	High Pressure Raman Study of Lu3Al5O12. Physica Status Solidi (B): Basic Research, 1999, 211, 301-307.	1.5	12
117	The Role of the Intradimer C-C Bridge on the Stability of (C59N)2: A High Pressure Raman Study. Physica Status Solidi (B): Basic Research, 1999, 211, 435-441.	1.5	1
118	Phonons in Rare-Earth Aluminum Garnets and Their Relation to Lattice Vibration of AlO4. Physica Status Solidi (B): Basic Research, 1999, 215, 193-198.	1.5	14
119	Comparative Raman Study of the 1D and 2D Polymeric Phases of C60 under Pressure. Physica Status Solidi (B): Basic Research, 1999, 215, 443-448.	1.5	11
120	Temperature dependence of exciton peak energies in ZnS, ZnSe, and ZnTe epitaxial films. Journal of Applied Physics, 1999, 86, 4403-4411.	2.5	119
121	On the nature of the laser irradiation induced reversible softening of phonon modes in C60 single crystals. Chemical Physics Letters, 1998, 290, 125-130.	2.6	23
122	Softening of phonon modes in C60 crystals induced by laser irradiation: Thermal effects. Journal of Experimental and Theoretical Physics, 1998, 87, 967-972.	0.9	1
123	Charge Transfer in C60*TMTSF*2(CS2) Complex at High Pressure: A Raman Spectroscopic Study.. Review of High Pressure Science and Technology/Koatsuryoku No Kagaku To Gijutsu, 1998, 7, 733-735.	0.0	2
124	Temperature and Composition Dependence of Exciton Peak Positions and Band Gap Energies of		